

ABSTRACT

A secondary battery includes: a positive electrode; a negative electrode; a porous electron-insulating layer adhered to a surface of at least one selected from the group consisting of the positive electrode and the negative electrode; and an electrolyte. The porous electron-insulating layer comprises a particulate filler and a resin binder, and the particulate filler comprises an indefinite-shape particle comprising a plurality of primary particles that are joined to one another. A neck is preferably formed between the primary particles. Since the porous electron-insulating layer has high porosity, it is possible to obtain a secondary battery that exhibits excellent low-temperature characteristics, which are particularly important in actual use, and that is capable of discharging at a large current.